

REMARKS

Claim 27 has been canceled herein without prejudice. Claims 28, 31, and 33 have been amended herein. Claim 35 has been added. Claims 1-35 are now pending in the Application. No new matter has been added. Entry of the amendment is respectfully requested. Reconsideration is respectfully requested.

New claim 35 corresponds to allowable claim 27 rewritten in independent form.

Claims 28, 31, and 33 have been amended to depend from new claim 35.

Support for these amendments is found in the original claims, Specification, and drawings.

Amendments to Specification

The paragraph beginning on page 1 at line 2 has been amended to correct a typographical error. The filing year for provisional Application No. 60/465,733 has been corrected to replace "2002" with --2003--.

Rejections Pursuant To 35 U.S.C. § 112

In the Action, claim 22 was rejected pursuant to 35 U.S.C. § 112, second paragraph. It was asserted in the Action that claim 22 was indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. This rejection is respectfully traversed.

The term "non-standard" is sufficiently definite in view of the discussion of this feature in the Specification. For example, in the paragraph beginning at page 63, line 10, the Specification

clearly discloses that such nonstandard embedded instructions as recited in claim 22 correspond to instructions which "do not conform to published standards and/or which are generally nonpublic". Thus Applicants respectfully submit that the recitation of the term "non-standard" in claim 22 is sufficiently clear and definite in view of the Specification.

The Action asserts that the term "non-standard" is indefinite because the scope of what is standard can change over time". Applicants disagree.

The Federal Circuit held that terms such as "normally", "traditionally" and "standard" recited in claims are generally accorded their ordinary and customary meanings, and that, in view of their implicit time-dependence, claim limitations qualified by those terms correspond to technology existing at the time of the invention. *PC Connector Solutions LLC v. SmartDisk Corp.*, 74 U.S.P.Q.2d 1698, 1701 (*Fed. Cir.* 2005).

Applicants' use of "non-standard" is consistent with its ordinary and accustomed meaning. Also, the domain of published standards is a set that is determinable as of the effective filing date of the present case. Thus, in view of *PCT Connector Solutions LLC* the claims are not indefinite for reciting the term "non-standard". For the Examiner's convenience, a copy of the Federal Circuit's opinion in *PCT Connector Solutions LLC* is attached herewith.

It is respectfully submitted that all the pending claims are sufficiently definite, and that the rejection pursuant to 35 U.S.C. § 112 should be withdrawn. Claim 22 was not rejected on any other basis; therefore claim 22 should be allowable.

Subject Matter Indicated To Be Allowable

It was indicated in the Action that claims 27-34 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form.

Acknowledgment of allowable subject matter is greatly appreciated.

The subject matter recited in claim 27 has been rewritten in independent form as new claim 35. Also, claims 28, 31, and 33 have been amended to depend from new claim 35.

It is respectfully submitted that pending claims 27-34 no longer depend from a rejected base claim and therefore should be allowable.

The Pending Claims Are Not Obvious in View of the Applied Art

Claims 1-10, 12, 14-21, 23, 25, and 26 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Coutts, U.S. Patent No. 5,563,393 in view of Gill, et al., U.S. Patent No. 6,279,826 (“Gill”).

Claims 11 and 13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Coutts as modified by Gill as applied to claim 1, in view of Moodie, et al., U.S. Patent Application Publication No. 2003/0009374 (“Moodie”).

Claim 24 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Coutts as modified by Gill as applied to claim 1, in view of Anderson, et al., U.S. Patent No. 4,186,871 (“Anderson”).

These rejections are respectfully traversed.

Claim 1

Claim 1 is an independent claim which is directed to an apparatus comprising an automated banking machine. Coutts and Gill do not disclose or suggest each of the features and relationships recited in claim 1. For example, nowhere do Coutts and Gill disclose or suggest at least the following recited in claim 1:

- **wherein responsive to a condition of at least one of the transaction function devices, the at least one controller is operative to cause diagnostic data to be stored in the at least one data store, and**
- **wherein responsive to an authorized portable diagnostic article being operatively connected with the diagnostic article reading device (in supporting connection with the housing) of the machine, the at least one controller is operative to enable indicia corresponding to the diagnostic data (stored in the data store) and significance of the diagnostic data to operation of the machine to be output through the output device (in supporting connection with the housing).**

With respect to these recited features, the Action acknowledges that Coutts only communicates by radio signal and thus lacks a teaching of a diagnostic article in supporting connection with the housing. However, the Action asserts that Gill teaches diagnostics for an ATM that occur by a wired physical connection. The Action also asserts that “it would have been obvious . . . to substitute a physical, wired connection for the wireless connection of Coutts in order to (a) reduce risk of radio communications being intercepted, (b) have a more reliable

wired as opposed to wireless connection and (c) avoid misdirected communications where there are multiple ATMs near each other.”

However, even if it were possible (and/or obvious) to combine Coutts with Gill as suggested to replace the wireless connection of Coutts with the alleged wired connection of Gill (which it is not), such a combination still does not disclose or suggest each of the features and relationships recited in claim 1.

Coutts is directed to an interface device (12) for use by an operator in carrying out maintenance of an ATM (10) wirelessly. The interface device includes its own screen (16) (Figures 3 and 4) (not a screen of the ATM) which provides a graphics display which is adapted to provide the operator with a sequence of terminal information or operation instructions (Column 3, lines 29-31). Creating a physical wired connection between the interface device (12) and the ATM (10) of Coutts as asserted in the Action in view of Gill, would still not produce, disclose or suggest a controller in an automated banking machine that outputs **through an output device of the automated banking machine**, indicia corresponding to diagnostic data stored on the automated banking machine and significance of the diagnostic data to operation of the automated banking machine.

Further, neither Coutts nor Gill disclose that recited indicia corresponding to diagnostic data is enabled to be output through the output device of the automated banking machine **responsive to an authorized portable diagnostic article being operatively connected with the diagnostic article reading device of the automated banking machine**. Nowhere does Coutts or Gill disclose or suggest causing an output device of an ATM to output diagnostic data and indicia which explains the significance of the diagnostic data, responsive to a connection of a

portable diagnostic article with a reading device. Thus neither Coutts nor Gill discloses or suggests each of the features and relationships recited in claim 1. It follows that the Action has not established *prima facie* obviousness.

The Action also asserts that as “for ‘supporting connection’, this is taught by such old and well-known technologies as USB memory sticks, and a motivation is so that a technician doesn’t have to personally hold a diagnostic device for an extended period of time.” It is unclear how this assertion relates the alleged teachings of Coutts and Gill. Neither reference discusses USB memory sticks. In addition, neither reference discloses or suggests any problems associated with holding the interface device (12) of Coutts for an extended period of time. Further, even if were known in the prior art for there to be problems with holding devices for an extended period of time, a more probable solution to such a problem is to simply set the device on a table, floor, or other surface. The mere assertion that the interface device (12) of Coutts could hypothetically be too heavy to hold (an assertion for which there is no support in Coutts), does not provide any apparent reason, teaching, suggestion, or motivation to modify the ATM of Coutts to output indicia corresponding to diagnostic data and the significance of the diagnostic data, responsive to a connection of a portable diagnostic article with a reading device.

In addition, Coutts teaches away from running software in the ATM itself to check out the "state of health" of a terminal. The reason given by Coutts is that the alpha-numeric display and keypad of Coutts' ATM needed to run such “state of health” software are located within the ATM casing. Thus Coutts teaches that use of such an operator panel, even for such simple tasks as reviewing the ATM's diagnostic system, has the disadvantage that it requires the operator to have access to the interior of the ATM, resulting in the ATM service being shut down (Column 1, lines 23-33). Such a teaching in Coutts of the disadvantages of using an operator panel in an ATM

provides an explicit teaching directly contrary to and that would discourage one of ordinary skill in the art from modifying Coutts in the manner suggested in the Action. A reference teaching away from the recited invention does not support *prima facie* obviousness. It is improper to reconstruct the recited invention based on the disclosure of the Applicants. An obviousness rejection cannot be based on a combination of features in prior art references if making the combination would result in destroying the utility or advantage of the device shown in such prior art references. Note *In re Fine* 5 U.S.P.Q.2d 1598-99 (Fed. Cir. 1988).

Applicants respectfully submit that the Office has not established *prima facie* obviousness with respect to claim 1. The applied art does not disclose or suggest each and every element, feature, and relationship of the claimed invention, as is required to sustain the rejection. Nor is there any prior art apparent reason, teaching, suggestion, or motivation for modifying Coutts in view of Gill (or USB drives) so as to produce the claimed invention. Further, it would not have been obvious to one having ordinary skill in the art to have modified the applied art to have produced the claimed invention. Applicants respectfully submit that the 35 U.S.C. § 103(a) rejection of claim 1 is improper and should be withdrawn. It follows that claims 2-26 which depend from claim 1 are also allowable.

The Dependent Claims

Each of the dependent claims depends directly or indirectly from an independent claim. The independent claims have been previously shown to be allowable. "If an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious" (MPEP 2143.03). *In re Fine*, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). Thus, it is respectfully submitted that the dependent claims are allowable on the same basis.

Furthermore, each of the dependent claims additionally recites specific features and relationships that patentably distinguish the claimed invention over the applied art. None of Coutts, Gill, Moodie, or Anderson, taken alone or in combination, discloses or suggests the features and relationships that are specifically recited in the dependent claims. Thus, it is respectfully submitted that the dependent claims are further allowable due to the recitation of such additional features and relationships.

For example, with respect to claim 3, nowhere does Coutts or Gill disclose or suggest outputting through an output device of an automated banking machine, significance of diagnostic data obtained from a diagnostic article.

Also for example, claim 9 recites that the automated banking machine receives a secret code from the diagnostic article to enable the output of the indicia on the output device of the automated banking machine. The referenced portion of Coutts in the Action with respect to claim 9 (e.g., Column 3, lines 30-45) refers to a code number being input into the interface device (12), not from the interface device. Thus, nowhere does Coutts or Gill disclose or suggest the features recited in claim 9.

With respect to claim 14, the Action asserts that the phrase ‘indicating significance of . . .’ is confusing and is not granted patentable weight. However, this phrase is not specifically recited in claim 14. Thus all of the subject matter recited in claim 14 should be given patentable weight. Nowhere does the applied art disclose or suggest a controller in an automated banking machine that outputs through its output device, indicia corresponding to service manual data received from a diagnostic article.

Claim 16 recites that the transaction function device carries out at least a portion of the diagnostic test. The sensor in Coutts referenced in the Action does not correspond to a transaction function device (e.g., a cash dispenser, depository, etc.). Thus the applied art does not disclose or suggest the subject matter recited in claim 16.

With respect to claim 20, nowhere does Coutts or Gill disclose or suggest a controller of an automated banking machine that loads browser software from a diagnostic article.

With respect to claim 22, nowhere does Coutts or Gill disclose or suggest browser software loaded from a diagnostic article that is operative to interpret non-standard embedded instructions in service manual data received from the diagnostic article.

Conclusion

Each of Applicants' pending claims specifically recites features and relationships that are neither disclosed nor suggested in any of the applied art. Furthermore, the applied art is devoid of any reason, teaching, suggestion, or motivation for combining features of the applied art so as to produce Applicants' invention. Allowance of all of Applicants' pending claims is therefore respectfully requested.

The undersigned will be happy to discuss any aspect of the Application by telephone at the Examiner's convenience.

Respectfully submitted,



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Source: USPQ, 2d Series (1986 - Present) > U.S. Court of Appeals, Federal Circuit > PC Connector Solutions LLC v. SmartDisk Corp., 74 USPQ2d 1698 (Fed. Cir. 2005)



PC Connector Solutions LLC v. SmartDisk Corp., 74 USPQ2d 1698 (Fed. Cir. 2005)

74 USPQ2d 1698

PC Connector Solutions LLC v. SmartDisk Corp.

U.S. Court of Appeals

Federal Circuit

No. 04-1180

Decided May 6, 2005

406 F3d 1359

Headnotes

PATENTS

[1] Patent construction — Claims — Defining terms (►125.1305)

Terms "conventional," "normally," "traditionally," and "standard," in claims directed to connection of peripherals to computer via coupler inserted into diskette drive, are properly construed as limiting peripherals and computer input/output ports described by such terms to those in existence in 1988 when patent application was filed, since claim's meaning must be interpreted as of its effective filing date, and descriptive properties of terms at issue are implicitly time-dependent, since there is nothing in written description or prosecution history that constitutes clear attempt by patentee to impart any special meaning to these terms, and since terms are therefore governed by their ordinary and customary meanings.

[2] Infringement — Literal infringement (►120.05)

Patent claims directed to connection of peripherals to computer via coupler inserted into diskette drive, which require peripheral device to be "normally connectable to a conventional computer input/output port," and to have "standard input/output port" that is "traditionally connectable to a computer," are not infringed by accused devices using flash memories and smart cards that employ flat, planar surface contact electrodes at I/O interface, since, properly construed, claim limitations at issue require peripheral device to be connectable to computer I/O port that was in common use at time patent application was filed in 1988, and since even to casual observer, it is clear that accused devices are not connectable to vintage 1988 computer I/O port that uses multi-pin connector.

[3] Infringement — Doctrine of equivalents — In general (►120.0701)

JUDICIAL PRACTICE AND PROCEDURE

Procedure — Judicial review — Appealability (►410.4603)

Patent infringement plaintiff appealing from summary judgment of noninfringement cannot argue that asserted patent claims are infringed under doctrine of equivalents, since, having presented federal district court with only conclusory statements regarding equivalence, without any particularized evidence and linking argument as to "insubstantiality of the differences" between claimed invention and accused device, or with respect to "function, way, result" test, plaintiff is now foreclosed from invoking substantive application of doctrine; district court's failure to consider infringement under doctrine of equivalents was at most harmless error, since finding of equivalence would effectively vitiate time-related limitations in claims.

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Particular Patents

Particular patents — Electrical — Computer peripherals

5,224,216, Gordon and Reichmann, computer diskette drive communication interface, summary judgment of noninfringement affirmed.

Case History and Disposition

Appeal from the U.S. District Court for the Middle District of Florida, Steele, J.

Action by PC Connector Solutions LLC against SmartDisk Corp. and Fuji Photo Film U.S.A. Inc. for patent infringement. Plaintiff appeals from summary judgment of noninfringement. Affirmed.

Attorneys

Jonathan H. Steinberg, Morgan Chu, and Jonathan S. Kagan, of Irell & Manella, Los Angeles, Calif., for plaintiff-appellant.

Larry S. Nixon and Mark E. Nusbaum, of Nixon & Vanderhye, Arlington, Va., for defendants-appellees.

Judge

Before Michel, chief judge, and Lourie and Prost, circuit judges.

Opinion Text

Opinion By:

Lourie, J.

PC Connector Solutions LLC ("PC Connector") appeals from the decision of the United States District Court for the Middle

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District of Florida granting summary judgment of noninfringement of United States Patent 5,224,216 in favor of SmartDisk Corporation and Fuji Photo Film U.S.A., Inc. (collectively, "SmartDisk"). *PC Connector Solutions LLC v. SmartDisk Corp.*, No. 2:00-CV-539 (M.D. Fla. Nov. 10, 2003) (original judgment); *PC Connector Solutions LLC v. SmartDisk Corp.*, No. 2:00-CV-539 (M.D. Fla. Feb. 23, 2005) (amended judgment). Because the district court did not err in granting summary judgment, we affirm.

BACKGROUND

PC Connector sued SmartDisk for infringement of the '216 patent, which is directed to the connection of peripherals to a computer via a coupler inserted into the diskette drive. The salient features of the invention are set forth in claims 1 and 10, the only claims at issue on appeal, which read in relevant part as follows:

1. In combination a computer having a diskette drive, *an end user computer peripheral device having an input/output port normally connectible to a conventional computer input/output port*, and a coupler which couples the computer with the end user computer peripheral device without using a conventional computer input/output port:

said coupler being sized and shaped for insertion within the diskette drive of the computer ... whereby data is transferred from said computer to said end user computer peripheral device via said read/write head of said computer, said coupler, and said input/output port of said end user computer peripheral device.

'216 patent, col. 6, ll. 38-58 (emphasis added).

10. A method for forming a data transfer coupling between a computer having a diskette drive having a read/write head and an input/output port of one separate end user computer peripheral of a host of separate end user computer peripherals where *each separate end user computer peripheral is traditionally connectable to a computer by means of an input/output port of the computer and the standard input/output port of the particular separate computer peripheral*, said method comprising:

inserting a coupler having a stationary data transfer element into the diskette drive ... , and

connecting said coupler to the standard input/output port of the separate computer peripheral

Id., col. 8, ll. 1-19 (emphasis added). The accused devices are various diskette-shaped, sleeve-like adapters for flash memories and smart cards that allow such media to be accessed through a diskette drive: a flash memory or a smart card is first inserted wholly within the adapter, which is then inserted into a diskette drive, whereupon the adapter facilitates data transfer between its resident flash memory or smart card and the computer. (Martin Aff. ¶¶ 12-13; J.A. 264-65).

SmartDisk moved for summary judgment of noninfringement. The matter was referred to a magistrate judge who, relying on the analysis in *Kopykake Enters., Inc. v. Lucks Co.*, 264 F.3d 1377 [60 USPQ2d 1124] (Fed. Cir. 2001), of the word "conventional" as referring to technologies existing at the time of the invention, found no literal infringement of claim 1 on the basis that the flash memories and smart cards used with the accused devices were not peripherals that were "normally connectable to a conventional computer input/output port" in existence at the time of filing in 1988.¹ Similarly, by construing the terms "traditionally connectable" and "standard" in claim 10 as referring to input/output ("I/O") technologies existing in 1988, the magistrate judge found no literal infringement of that claim. Adopting the magistrate judge's report and recommendation, the district court² granted SmartDisk's motion for summary judgment of noninfringement.

¹ The '216 patent issued from a continuation application whose parent had been filed in 1988. The accused devices were developed in the 1990s. (Martin Aff. ¶ 14; J.A. 265-66).

² Because the district court adopted the magistrate judge's report and recommendation, we shall refer to the magistrate judge's findings and conclusions as those of the district court.

PC Connector appealed. We have jurisdiction³ pursuant to 28 U.S.C. § 1295(a)(1).

³ While SmartDisk's counterclaims asserted both noninfringement and invalidity, the ruling granting summary judgment of noninfringement initially contained no reference to the invalidity counterclaim. During oral argument, counsel for both parties recognized the pendency of the invalidity counterclaim, and the consequent likelihood of a jurisdictional defect in the absence of a certification under Federal Rule of Civil Procedure 54(b). The parties thereafter obtained an amended judgment from the district court dismissing the counterclaim, *nunc pro tunc*, which ripened the appeal. See *Storage Tech. Corp. v. Cisco Sys., Inc.*, 329 F.3d 823, 830 [66 USPQ2d 1545] (Fed. Cir. 2003).

DISCUSSION

We review *de novo* the district court's grant of summary judgment of noninfringement. *Ethicon Endo-Surgery, Inc. v. United States Surgical Corp.*, 149 F.3d 1309, 1315 [47 USPQ2d 1272] (Fed. Cir. 1998). Determining whether a claim has been infringed requires a two-step analysis. *Carroll Touch, Inc. v. Electro Mech. Sys., Inc.*, 15 F.3d 1573, 1576 [27 USPQ2d 1836] (Fed. Cir. 1993). "First, the claim must be properly construed to determine its scope and meaning. Second, the claim as properly construed must be compared to the accused device or process." *Id.* In seeking reversal, PC Connector charges that the determination of noninfringement was: (1) premised on a flawed claim construction; and (2) fatally deficient for failing to include an analysis under the doctrine of equivalents. Our review of the record, however, reveals nothing that compels us to disturb the judgment. See *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 1540 [218 USPQ 871] (Fed. Cir. 1983) ("We sit to review judgments, not opinions.").

A. Claim Construction

Claim construction is a question of law that we review without deference. *Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448, 1454 [46 USPQ2d 1169] (Fed. Cir. 1998) (en banc). In interpreting claims, a court "should look first to the intrinsic evidence of record, *i.e.*, the patent itself, including the claims, the specification and, if in evidence, the prosecution history." *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 [39 USPQ2d 1573] (Fed. Cir. 1996).

[1] PC Connector accuses the district court of having improperly construed the terms "normally connectible" and "conventional" in claim 1, and "traditionally connectible" and "standard" in claim 10, as fixing the peripherals and computer I/O ports described by such terms to be those in existence at the time of filing in 1988. According to PC Connector, the terms merely clarify the manner of connecting peripherals to a computer—*i.e.*, through dedicated I/O ports typically clustered at the rear of the chassis—without imposing a time-based limitation on the I/O technologies involved. We disagree.

PC Connector essentially advances a construction that would require the words "normally," "conventional," "traditionally," and "standard" to be redefined as specifically referring to—or, depending on the context, synonymous with being connectable to—a dedicated computer I/O port. We conclude that the record is unable to support this departure from the ordinary meanings of those words, whose descriptive properties are implicitly time-dependent. A claim cannot have different meanings at different times; its meaning must be interpreted as of its effective filing date. See *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 986 [34 USPQ2d 1321] (Fed. Cir. 1995) (en banc) ("[T]he focus is on the objective test of what one of ordinary skill in the art at the time of the invention would have understood the term to mean."), *aff'd*, 517 U.S. 370 [38 USPQ2d 1461] (1996); see also *Kopyake*, 264 F.3d at 1383 ("[W]hen a claim term understood to have a narrow meaning when the application is filed later acquires a broader definition, the literal scope of the term is limited to what it was understood to mean at the time of filing."). Furthermore, "unless it appears from the specification or the file history that they were used differently by the inventor," the words of a claim are generally accorded their "ordinary and accustomed meaning." *Carroll Touch*, 15 F.3d at 1577; see also *Vitronics*, 90 F.3d at 1582 ("[A] patentee may choose to be his own lexicographer and use terms in a manner other than their ordinary meaning, as long as the special definition of the term is clearly stated in the patent specification or file history.").

We find nothing in the written description that amounts to a clear attempt by the patentee to impart any special meaning to the words "normally," "conventional," "traditionally," or "standard." Likewise, in the prosecution history, we do not read the patentability arguments that were made specifically to distinguish a test fixture as having effected the particular redefinition now advanced on appeal. As a consequence, the terms "normally," "conventional," "traditionally," and "standard" are governed by their ordinary and

customary meanings, and that, in view of their implicit time-dependence, the district court did not err in construing the literal scope of the claim limitations qualified by those terms as being limited to technologies existing at the time of the invention.

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PC Connector's argument that the dictionary definitions of "normally," "conventional," "traditionally," and "standard" contain no explicit reference to a time limitation is not persuasive, as their time-related significance is implicit from their ordinary usage—just as other words are implicitly *not* time-related. A comparison of the words "conventional" and "dedicated" is instructive in this regard, as PC Connector's briefs appear to treat them as interchangeable and coterminous in claim scope, when, in fact, they are not. To illustrate, a present-day USB port may be described as a "dedicated" I/O port within the ordinary meaning of "dedicated" as that word would be used to characterize the I/O ports found on a computer built in 1988, yet it would not be considered "conventional" back then, even though it is "conventional" today. (Martin Aff. ¶ 11; J.A. 264). Thus, unlike the word "dedicated," the word "conventional" necessarily has a meaning specific to the time of filing. Accordingly, the district court did not err in its claim construction.

B. Infringement

Given its claim construction, the district court found no genuine issue of material fact on the infringement question, and thus held that there was no literal infringement. Summary judgment on the issue of infringement is proper when no reasonable jury could find that every limitation recited in a properly construed claim either is or is not found in the accused device either literally or under the doctrine of equivalents. *Bai v. L & L Wings, Inc.*, 160 F.3d 1350, 1353-54 [48 USPQ2d 1674] (Fed. Cir. 1998).

[2] Claim 1 requires that the peripheral device used with the claimed coupler have "an input/output port *normally* connectable to a *conventional* computer input/output port," while claim 10 similarly requires the peripheral device to have a "*standard* input/output port" that is "*traditionally* connectable to a computer." Properly construed, these claim limitations require the peripheral device to be connectable to a computer I/O port that was in common use at the time of filing in 1988.

Because the flash memories and smart cards that are used with the accused devices employ flat, planar surface contact electrodes at the I/O interface, (Martin Aff. ¶¶ 25-27; J.A. 273-74), which, to even a casual observer, cannot be connected to a vintage 1988 computer I/O port that uses a multi-pin connector, there can be no literal infringement.⁴ See *Builders Concrete, Inc. v. Bremerton Concrete Prods. Co.*, 757 F.2d 255, 257 [225 USPQ 240] (Fed. Cir. 1985) ("Literal infringement requires that the accused device embody every element of the claim.").

⁴ Because connector incompatibility is dispositive of the infringement issue for claim 10, we need not address SmartDisk's argument regarding an alleged order of the method steps, which it advances as an alternative ground for affirming the finding of noninfringement.

[3] As for infringement under the doctrine of equivalents, that argument is not properly before us. Having presented the district court with only conclusory statements regarding equivalence, without any particularized evidence and linking argument as to the "insubstantiality of the differences" between the claimed invention and the accused device, or with respect to the "function, way, result" test, PC Connector is now foreclosed from invoking the substantive application of the doctrine of equivalents. *Texas Instruments Inc. v. Cypress Semiconductor Corp.*, 90 F.3d 1558, 1567 [39 USPQ2d 1492] (Fed.

Cir. 1996); see also *Lear Siegler, Inc. v. Sealy Mattress Co.*, 873 F.2d 1422, 1425 [10 USPQ2d 1767] (Fed. Cir. 1989) ("The evidence and argument on the doctrine of equivalents cannot merely be subsumed in plaintiff's case of literal infringement."). Moreover, conclusory statements regarding equivalence are not enough to warrant a remand on that issue, as they do not raise any genuine issues of material fact. See *Intellicall, Inc. v. Phonometrics, Inc.*, 952 F.2d 1384, 1389 [21 USPQ2d 1383] (Fed. Cir. 1992).

Even if there were not such a foreclosure, a finding of equivalence in this case would effectively vitiate the time-related limitation on the I/O ports, if what is "normally connectible," "conventional," "traditionally connectable," and "standard" at the time of filing were deemed to be equivalent to what is "normally connectible," "conventional," "traditionally connectable," and "standard" at a future date. As a matter of law, there can be no infringement under the doctrine of equivalents "[i]f a theory of equivalence would vitiate a claim limitation." *Tronzo v. Biomet, Inc.*, 156 F.3d 1154, 1160 [47 USPQ2d 1829] (Fed. Cir. 1998). Accordingly, the district court's failure to consider infringement under the doctrine of equivalents was, at most, harmless error.

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We have considered the parties' other arguments and conclude that they are either unpersuasive or unnecessary for resolution of this appeal.

CONCLUSION

For the foregoing reasons, we conclude that the grant of summary judgment of noninfringement was not error, and accordingly affirm.

AFFIRMED

- End of Case -